Attorney Docket No.: 21016-0002US1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant

: Spangenberg et al.

Art Unit : 1638

Serial No.

: 10/580,868

Examiner: Phuong Bui

Filing Date (§ 371(c)): May 7, 2007

Conf. No.: 7075

Title

: ICE RECRYSTALLISATION INHIBITION PROTEIN OR ANTIFREEZE

PROTEINS FROM DESCHAMPSIA, LOLIUM AND FESTUCA SPECIES OF

GRASS

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

REVOCATION AND NEW POWER OF ATTORNEY AND ELECTION OF ASSIGNEE TO CONDUCT PROSECUTION TO EXCLUSION OF INVENTORS

Under 37 C.F.R. § 3.73(b) AGRICULTURE VICTORIA SERVICES PTY. LTD., a corporation, certifies that it is the assignee of 100% of the right, title and interest in the patent application identified above (the "Application") by virtue of:

- X A chain of title from the inventors of the Application, to the current assignee as shown below. Copies of the assignments or other documents in the chain of title are attached.
- From German Spangenberg, Peter John Ulrik, Renata Martina Polotonianka, and State of Victoria, to Agriculture Victoria Services Pty. Ltd. and Australian Centre for Plant Functional Genomics Pty. Ltd. recorded in the United States Patent and Trademark Office (PTO) at Reel 019272, Frame 0686 on May 9, 2007 against the Application; and
- 2. From Agriculture Victoria Services Pty. Ltd. and Australian Centre for Plan Functional Genomics Pty. Ltd. to Agriculture Victoria Services Pty. Ltd. recorded in the PTO at Reel <u>022085</u>, Frame <u>0260</u> on <u>January 9, 2009</u> against the Application.

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned, whose title is supplied below, is empowered to act on behalf of the assignee.

Applicant: Spangenberg et al. Attorney Docket No.: 21016-0002US1

Serial No.: 10/580,868 Filed: May 7, 2007

Page : 2 of 2

The undersigned, acting on behalf of the assignee, hereby revokes all powers of attorney previously granted in the application and appoints practitioners associated with:

PTO CUSTOMER NO.:

26181

as its attorneys/agents to prosecute the application and to transact all business in the Patent and Trademark Office connected therewith with full powers of substitution and revocation, said appointment to be to the exclusion of the inventors and their attorneys/agents in accordance with the provisions of 37 CFR § 3.71 et seq. of the Patent and Trademark Office Rules of Practice.

All correspondence regarding the application should be sent to:

PTO Customer Number: 26181

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Date: 22/2/10	Respectfully submitted,	Mr Bruce Lang Company Secretary
	Name:	
	AGRICULTURE VICT	ORIA SERVICES PTY. LTD.

Customer No.: 26181 Fish & Richardson P.C. Telephone: (650) 839-5070 Facsimile: (650) 839-5071

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O:FISH & RICHARDSON P.C. COMPANY:PO BOX 1022



UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

MAY 10, 2007

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FISH & RICHARDSON P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022

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PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 571-272-3350. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, MAIL STOP: ASSIGNMENT SERVICES BRANCH, P.O. BOX 1450, ALEXANDRIA, VA 22313.

RECORDATION DATE: 05/09/2007

REEL/FRAME: 019272/0686

NUMBER OF PAGES: 8

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

DOCKET NUMBER: 21016-002US1

ASSIGNOR:

SPANGENBERG, GERMAN

DOC DATE: 08/21/2006

ASSIGNOR:

PETER, ULRIK

DOC DATE: 08/21/2006

ASSIGNOR:

RENATA, JOHN

DOC DATE: 08/21/2006

ASSIGNOR:

POLOTONIANKA, MARTINA

DOC DATE: 08/21/2006

ASSIGNOR:

STATE OF VICTORIA

DOC DATE: 09/14/2006

USPTO 5/11/2007 9:30:35 AM PAGE 3/004 Fax Server

'O:FISH & RICHARDSON P.C. COMPANY:PO BOX 1022

019272/0686 PAGE 2

ASSIGNEE:

AGRICULTURE VICTORIA SERVICES PTY. LTD 475 MICKLEHAM ROAD ATTWOOD, VICTORIA 3049, AUSTRALIA

ASSIGNEE:

0:11

AUSTRALIAN CENTRE FOR PLANT FUNCTIONAL GENOMICS PTY. LTD. HARTLEY GROVE URRBRAE, SOUTH AUSTRALIA 5064

AUSTRALIA

SERIAL NUMBER: 10580868

FILING DATE: ISSUE DATE:

PATENT NUMBER:

TITLE: ICE RECRYSTALLISATION INHIBITION PROTEIN OR ANTIFREEZE PROTEINS

FROM DESCHAMPSIA, LOLIUM AND FESTUCA SPECIES OF GRASS

THERESA FREDERICK, EXAMINER ASSIGNMENT SERVICES BRANCH PUBLIC RECORDS DIVISION

PAGE

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05/09/2007 11:10 FAX 8508395071

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Substitute Form PTO-1595 Attorney Docket No.: 21016-002US1

Typed Name of Person Signing Certificate

RECORDATION FORM COVER SHEET PATENTS ONLY

Commissioner for Patents: Please record the attached original documents	ment(s) or copy(les).	
Name of conveying party(les):	2. Name and address of receiving party(les):	
German Spangenberg, Ulrik Peter, John Renata,		
Martina Polotonianka, and State of Victoria	Agriculture Victoria Services Pty. Ltd	
Additional name(s) attached? 디 Yes 명 No	475 Mickleham Road	
3. Nature of conveyence:	Attwood, Victoria 3049	
Assignment	Australia	
☐ Merger ☐ Security Agreement ☐ Change of Name	and	
□ Other:	Australian Centre for Plant Functional	
	Genomics Pty. Ltd.	
	Hartley Grove	
	Urrbrae, South Australia 5064	
	Australia	
	1 1 m	
Execution Date: 8/21/2006 and 09/14/2006	Additional names/addresses attached? Yea No	
4. Application number(s) or patent number(s):	· · · · · · · · · · · · · · · · · · ·	
If this document is being filed with a new application, the execution		
A. Patent Application No(s).:	B: Patent No(a).:	
10/580,868		
	atteched? 🗆 Yes 🗷 No	
Name/address of party to whom correspondence concerning document should be mailed:	5. Total number of applications/patents involved: 1	
	7. Total fee (37 CFR §3.41): \$40	
PTO CUSTOMER NO. 26181	☐ Enclosed El Authorized to charge Deposit Account.	
•	8. Deposit Account No.: 06-1050	
•	Please apply any additional charges, or any credita, to our Deposit Account No. 08-1050.	
DO NOT US	JE THIS SPACE	
6 State and Street To the heat of real broaded as as	nd belief, the foregoing information is true and correct and	
any attached copy is a true copy of the original docume		
Richard G. A. Bone	1.0	
Reg. No. 56.637	6. A. Ber May 9, 2007	
Name of Person Signing Signature	. Date	
7	r of pages including coversheet, attachments and document: 9 pages	
5041 5048.doc	s of helice arranging coverages, associationing and cocriticair. A helice	
CERTIFICATE OF TRANSMISSION	BY FACEDMILE	
I hereby carrify that this correspondence is indicated below.	s being transmitted by factimile to the Patent and Trademark Office on the date	
5/9/2007	Forms David	

Signature

Date of Transmission

DEED OF ASSIGNMENT

THIS DEED is made the day it is executed by the last of the parties to execute it

BETWEEN

German SPANGENBERG of 56 Arthur Street,

Bundoora, Victoria 3083, Australia

Ulrik Peter JOHN of 19 Rucker Street, Westgarth, Victoria 3070, Australia

Renata Martina POLOTONIANKA of 117 Easy Street, Collingwood, Victoria 3066, Australia

("the Inventors")

AND

The State of Victoria ("the State")

AND

Agriculture Victoria Services Pty. Ltd. of 475 Mickleham Road, Attwood, Victoria 3049,

Australia ("AVS")

AND

Australian Centre for Plant Functional

Genomics Pty. Ltd. of Hartley Grove, Urrbrae, South Australia 5064, Australia ("ACPFG").

RECITALS

- A. AVS is the applicant named in the provisional application for the grant of a patent set out in the Schedule ("the Provisional Application") in respect of the Invention, the title of which is set out in the Schedule ("the Invention").
- B. AVS and ACPFG are named as joint applicants in the international patent application, lodged under the Patent Cooperation Treaty, set out in the

- Schedule ("the PCT Application"). The PCT application claims priority from the Provisional Application.
- C. The Department of Primary Industries ("DPI") is a department of the State. The Department Head of DPI is the employer of the Inventors. The Inventors made the invention in the course of their employment. Pursuant to the terms of the Inventors' employment, the whole of the rights in respect of the Invention vested in the State on the making of the Invention.
- D. Under the terms of an agreement between the State and AVS made prior to the filing of the Provisional Application, the State agreed to transfer its rights in relation to the Invention to AVS.
- E. Subsequent to the filing of the Provisional Application, but prior to the filing of the PCT Application, AVS agreed to assign a half share in its rights in respect of the Invention and the Provisional Application to ACPFG.
- F. On 24 November 2004, the Inventors, at the request of the State, executed a purported assignment of their rights in respect of the Invention to ACPFG and AVS jointly, and a second purported assignment of their rights in respect of the Invention to AVS, in an attempt to give effect to the agreements described in Recitals D and E.
- G. The parties have executed this deed to give effect to the agreements described in Recitals D and E.

ASSIGNMENT

- 1. AVS and ACPFG agree, that from the date of this Deed, any rights throughout the world in relation to:
 - (a) the Invention (including but not limited to the right to apply for the grant of a patent in respect of the Invention in any country of the world and the right to bring legal proceedings and to obtain any relief any infringement of rights in relation to the Invention which occurs before or after the date of this Deed); and

- (b) the Provisional Application, including but not limited to the right to claim priority from the Provisional Application in respect of applications made for the grant of a patent anywhere in the world; and
- (c) the PCT Application, including but not limited to the right to file any national phase and/or regional phase patent applications from the PCT application;

which were not held by them as tenants in common in equal shares at the date of this Deed shall be held by them as tenants in common in equal shares.

- AVS assigns absolutely to ACPFG, at the date of this Deed, a half interest in any rights AVS may have throughout the world as the applicant for the Provisional Application (other than rights co-owned with AFCPG prior to the execution of this Deed), including but not limited to the right to claim priority from the Provisional Application in respect of applications made for the grant of a patent anywhere in the world.
- 3. For the avoidance of doubt, the Inventors and the State assign absolutely to AVS and ACPFG as tenants in common in equal shares, at the date of this Deed, the whole of any rights they may have throughout the world in relation to:
 - (a) the Invention (including but not limited to the right to apply for the grant of a patent in respect of the Invention in any country of the world, and the right to bring legal proceedings and to obtain any relief any infringement of rights in relation to the Invention which occur before or after the date of this Deed); and
 - (b) the Provisional Application, including but not limited to the right to claim priority from the Provisional Application in respect of applications made for the grant of a patent anywhere in the world; and
 - (c) the PCT Application, including but not limited to the right to file any national phase and/or regional phase patent applications from the PCT application.
- Each of the Inventors and the State agrees to provide any assistance reasonably required by AVS and ACPFG in order to give full effect to this

Deed (including but not limited to the execution of any documents). Each of the Inventors irrevocably appoints each of the directors of AVS and ACPFG as his or her attorney to do all acts and execute all documents which he or she is obliged to do or execute by this clause.

5. AVS and ACPFG shall be jointly responsible for paying the costs of preparation and execution of this Deed and for any stamp duty payable in respect of this Deed or the assignment.

SCHEDULE

COUNTRY	FILING DATE	NUMBER	Title
Australia	24 Nov. 2003	2003906477	Modification of plant response to freezing and low temperature stress
International	24 Nov. 2004	PCT/AU2004/001633	Modification of plant response to freezing and low temperature stress

EXECUTED AS A DEED SIGNED, SEALED AND DELIVERED by

German SPANGENBERG

Ulrik Peter JOHN

Renata Martina POLOTONIANKA

in the presence of

.....(Signature of Witness)

EXECUTED for and on behalf of the State of Victoria by its authorised officer - Harrison (Name) (Signature) Meeter Technology Commercialisation Date: (4/4/06 **EXECUTED** for and on behalf of Agriculture Victoria Services, Pty. Ltd.(Director/Secretary) (Name) Mr Bruce Lang Company Secretary(Signature) DR C. L. NOBLE and by DIRECTOR....(Director) (Name) ..(Signature)

Date:

EXECUTED for and on behalf of Australian Centre for Plant Functional Genomics Pty. Ltd.

by	MICHAEL	GILBERI	(Director/Secretary	')
(Name	e)			
			(Signature)	
		LANGRIOG	E(Director)	
Date:	14/9/06	<i>.</i>	(Signature)	
	and by	(Name) Peter (Name)	(Name) PETER LANGRIDG (Name)	(Signature) The language (Director) (Name) (Signature)

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TO:RICHARD G.A. BONE COMPANY:FISH & RICHARDSON P.C.



UNITED STATES PATENT AND TRADEMARK OFFICE

Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office



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JANUARY 12, 2009

PTAS

RICHARD G.A. BONE FISH & RICHARDSON P.C. P.O.BOX 1022 MINNEAPOLIS, MN 55440-1022

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RECORDATION DATE: 01/09/2009 REEL/FRAME: 022085/0260

NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

DOCKET NUMBER: 21016-0002US1

ASSIGNOR:

AUSTRALIAN CENTRE FOR PLANT DOC DATE: 06/30/2008

FUNCTIONAL GENOMICS PTY LTD

ASSIGNEE:

AGRICULTURE VICTORIA SERVICES PTY

475 MICKLEHAM ROAD

ATTWOOD, VICTORIA, AUSTRALIA 3049

SERIAL NUMBER: 10580868 FILING DATE: 05/07/2007

PATENT NUMBER: ISSUE DATE:

TITLE: ICE RECRYSTALLISATION INHIBITION PROTEIN OR ANTIFREEZE PROTEINS

FROM DESCHAMPSIA, LOLIUM AND FESTUCA SPECIES OF GRASS

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022085/0260 PAGE 2

ASSIGNMENT SERVICES BRANCH PUBLIC RECORDS DIVISION

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TO:RICHARD G.A. BONE COMPANY:FISH & RICHARDSON P.C.

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1 01/09/2009 500750890

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
AUSTRALIAN CENTRE FOR PLANT FUNCTIONAL GENOMICS PTY LTD	06/30/2008

RECEIVING PARTY DATA

Name:	AGRICULTURE VICTORIA SERVICES PTY LTD
Street Address:	475 Mickleham Road
City:	Attwood, Victoria
State/Country:	AUSTRALIA
Postal Code:	3049

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	10580868

CORRESPONDENCE DATA

Fax Number: (877)769-7945

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: (650) 839-5070
Email: abriam@fr.com
Correspondent Name: Richard G.A. Bone

Address Line 1: FISH & RICHARDSON P.C.

Address Line 2: P.O.BOX 1022

Address Line 4: MINNEAPOLIS, MINNESOTA 55440-1022

ATTORNEY DOCKET NUMBER:	21016-0002US1

Richard G. A. Bone

Total Attachments: 4

NAME OF SUBMITTER:

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DEED OF ASSIGNMENT

DATED:

30TH DAY OF JUNE

2008

BETWEEN:

AUSTRALIAN CENTRE FOR PLANT FUNCTIONAL GENOMICS PTY LTD ACN 102 769 808 having the registered office at Hartley Grove, Urrbrae, South Australia, 5064 ("ACPFG")

AND

AGRICULTURE VICTORIA SERVICES PTY LTD (ACN 006 598 198) of 475 Mickleham Road, Attwood, Victoria ("AVS")

BACKGROUND

- A. By agreement between them dated 2 October 2006 and called "Transfer of Ownership and Licence Agreement" ("Agreement") ACPFG and AVS agreed to certain arrangements relating to the ownership and exploitation of the Patent(s) and the Patent Applications.
 - B. ACPFG has advised AVS that it wishes to exercise it rights under the Agreement and as a consequence is prepared to assign to AVS its rights and interest in and to the Patents, Patent Applications and the Invention (collectively the "Property")
 - C. The deed gives expression to the intent of the parties.

NOW IT IS AGREED:

Definitions

 The definitions set out in Clause 1.1 of the Agreement apply to this Deed. For convenience the attached Schedule (which forms part of this Deed) sets out the details of the Patents and Patent Applications.

Assignment

 ACPFG hereby assigns to AVS and AVS hereby takes from ACPFG all of ACPFG's right, title and interest in and to the Property.

Patent Costs

 AVS will assume sole responsibility for the costs of prosecuting and maintaining the Patents throughout the world.

Exploitation and Use of Patents

4. AVS will have the exclusive right to Exploit the Patents throughout the world in all fields, applications and territories including without limitation the ACPFG Field of Use, the Joint Field of Use and the AVS Field of Use and in all cases within and outside Territory A and Territory B.

5. Notwithstanding clause 4 of this Deed ACPFG will retain its rights to use the Invention as set out in Clause 2.4 of the Agreement, and to retain ownership of any outcomes of such research under that provision and Clause 2.5 of the Agreement shall continue to apply to any Improvements arising from such use.

Consequences of this Deed.

6. Clauses 3, 4, 7 and 8 of the Agreement no longer have any force or effect. Subject to this clause and Deed, the Agreement continues according to its terms.

Operation of Deed

7. This Deed operates as and from its date as set out above.

Further Assurances

8. ACPFG and AVS will do any and all acts and things to execute, file or deliver any and all papers and documents necessary or appropriate to give effect to the intent and purpose of this Deed.

Governing Law

9. This Agreement is governed by the laws of the State of Victoria and each Party submits to the jurisdiction of the courts of that State and their courts of appeal.

Dispute Resolution

10. If a dispute arises between the Parties (the "Dispute"), the Parties agree to negotiate in good faith to resolve the Dispute and will refer resolution of the Dispute to their chief executive officers, or their nominees. If the Dispute has not been resolved by negotiation within a reasonable time then either Party may refer the Dispute to mediation and will do so before initiating proceedings in a court to resolve the Dispute. A Dispute which is referred to mediation will be referred to the Australian Commercial Dispute Centre Limited ("ACDC") and be conducted in accordance with the ACDC Mediation Guidelines. If the Dispute has not been resolved within sixty (60) days of referral to ACDC either Party is free to initiate proceedings in a court. Nothing in this clause will prevent a Party from seeking interlocutory relief through courts of appropriate jurisdiction.

EXECUTED AS A DEED.

SIGNED	SEAL	ED	AND
DELIVERE	D for and o	on behalf	of
AUSTRALI			
PLANT FUI			
PTY LTD A	CN 102 7	69 808 1	by an
authorised o	lelegate ir	the pres	sence
of:	?		
(Stepho	nie Cale		
Witness	- Y		

STEPHANIES AGIUS.

Name (printed)

Delegate

Name (printed): M. 6 16501

Title GORAL MANAGER

SIGNED SEALED AND DELIVERED for and on behalf of AGRICULTURE VICTORIA SERVICES PTY LTD (ABN 23 006 598 198) by an authorised delegate in the presence of:

Witness

Renee Robinson

Name (printed)

Delegate

Mr Bruce Lang

Name (printed): .. Company Secretary

Title

SCHEDULE

Definitions as set out in the Agreement:

- "Complete PCT Application" means the Australian Complete PCT Application filed by AVS and ACPFG in respect of the Invention on 24 November 2004 and having the No. PCT/AU2004/001633.
- "Patent(s)" means all patents claiming priority from the Patent Applications including all divisional application of all such patents, and any amendments, continuation or continuation-in-part applications, extensions, reissues or re-grants of or to all or any of such patents and the Patent Applications.
- "Patent Applications" means either or both, as the case may be, of the Provisional Application and the Complete PCT Application.
- "Provisional Application" means the Australian Provisional Patent Application filed by AVS in respect of the Invention on 24 November 2004 and having the No. 2003906477.